

REMARKS/ARGUMENTS

Applicant has carefully reviewed and considered the Final Office Action mailed on May 21, 2010, and the references cited therewith.

Claims 1, 4-6, 8, 20, and 32-33 are amended, claims 21-31 are withdrawn, claims 37-39 are canceled, and no claims are added; as a result, claims 1-36 are now pending in this application.

§ 112 Rejection of the Claims

Claims 1-20 and 32-36 were rejected under 35 USC § 112, first paragraph, as allegedly failing to comply with the written description requirement. Applicant respectfully traverses the rejection as follows.

In the present disclosure, Figures 3a-3c show close-up views, and paragraphs 0032-0033 describe various embodiments, of radiopaque markers “directly and only attached to the generally linear connector strut”. Figures 1a-1c, 2, and 4-7 are more distal views that do not contradict the close up views of Figures 3a-3c in that the figures all show the radiopaque markers positioned at respective apices of the immediately adjacent serpentine bands that are axially aligned and connected with each other in opposing directions such that the single tubular framework has no gaps between the respective apices of the immediately adjacent serpentine bands. The close-up views illustrated in Figures 3a-3c show that such connections are accomplished by the connector struts, to which the radiopaque markers are “directly and only attached”.

Applicant notes that the specification of the present disclosure indicates in many locations that the radiopaque markers are only attached to the stent framework. For example, the specification as originally submitted recites, “the radiopaque markers are shown attached to the stent framework in the region of a strut which connects a peak 132 on one serpentine band to a trough 136 on another serpentine band.” (Paragraph 0033, lines 1-4).

The specification goes on to state that the radiopaque markers can be provided within or along a circumferential band of the stent framework. (Paragraph 0033, lines 5-7). However, Figure 7 shows radiopaque markers at the end of the cover and at the end of the stent that are clearly connecting apices of adjoining serpentine bands or a distal serpentine band with a circumferential band of the stent framework. Being among the distal views, such an illustration does not contradict that the radiopaque markers are “directly and only attached to the generally linear connector strut”, as illustrated in the close-up views of Figures 3a-3c.

Applicant respectfully submits that the specification being “silent as to the lack of radiopaque markers at other locations along the stent” supports the location of the radiopaque markers being limited to those positions actually described in the specification and shown in the figures. Accordingly, Applicant respectfully submits that none of the figures show, nor does the specification teach or suggest, that the radiopaque markers can be directly attached to the PTFE cover.

In addition, Applicant respectfully submits that an element of a particular claim set does not need to cover every possible embodiment described or suggested in a disclosure’s specification. Otherwise, there would be no need for restriction requirements and divisional applications. As such, even if the specification were to described embodiments with alternative means for attachment at positions other than the connector strut, which Applicant does not admit, that would not preclude claim sets that limit the radiopaque markers to being “directly and only attached to the generally linear connector strut” as long as there is adequate support for such an embodiment, among others, in the specification. Applicant respectfully submits that more than adequate support exists in the specification of the present disclosure as originally presented.

Accordingly, Applicant respectfully requests reconsideration and withdrawal of the § 112 rejection of claims 1-20 and 32-36.

§ 103 Rejection of the Claims

Claims 1, 2, 9-11, 15-17, 20, and 32-36 were rejected under 35 USC § 103(a) as being allegedly unpatentable over Wolff (U.S. Patent No. 5,104,404) in view of Cottone, Jr. (U.S. Patent No. 5,824,043). Applicant respectfully traverses the rejection as follows.

Applicant notes that the Wolff reference appears to teach, “a number of stent segments are connected together by hinges welded in place to provide articulation between the stent segments.” (Abstract). Applicant further notes that each of the opposing apices of the stent segments is not aligned and connected to each other, presumably because doing so would destroy the ability to provide articulation between the stent segments.

Hence, Applicant respectfully submits that the Wolff reference does not teach a stent comprising a single tubular framework having an outer surface and an inner surface and a plurality of interconnected struts, the struts comprising a plurality of serpentine bands and further comprising a generally linear connector strut attaching a peak of one serpentine band to a trough of an immediately adjacent serpentine band at the respective apices of each of the peak and the trough, wherein the respective apices of the immediately adjacent serpentine bands are axially aligned and connected with each other in opposing directions such that the single tubular framework has no gaps between the respective apices of the immediately adjacent serpentine bands.

In contrast, Applicant’s independent claim 1, as currently amended, presently recites:

A stent comprising a single tubular framework having an outer surface and an inner surface and a plurality of interconnected struts, the struts comprising a plurality of serpentine bands and further comprising a generally linear connector strut attaching a peak of one serpentine band to a trough of an immediately adjacent serpentine band at the respective apices of each of the peak and the trough, wherein the respective apices of the immediately adjacent serpentine bands are axially aligned and connected with each other in opposing directions such that the single tubular framework has no

gaps between the respective apices of the immediately adjacent serpentine bands, and wherein the opposing apices reduce a distance between the immediately adjacent serpentine bands and attach to the generally linear connector strut, the framework further comprising an outer covering of PTFE and an inner covering of PTFE, the outer covering extending along at least a portion of the outer surface of the expandable framework, the inner covering extending along at least a portion of the inner surface of the expandable framework, at least a portion of the inner and outer coverings being contiguous, the stent further comprising at least one radiopaque marker directly and only attached to the generally linear connector strut and disposed between the inner covering and the outer covering.

Applicant notes that the Cottone reference appears to teach, “a stent component and a graft component capturing a portion of the stent component.” (Abstract). However, Applicant respectfully submits that the Cottone reference does not cure the deficiencies of the Wolff reference just presented.

That is, the Wolff reference and the Cottone reference, individually or in combination, do not teach, suggest, or render obvious and every element and limitation of a stent comprising a single tubular framework having an outer surface and an inner surface and a plurality of interconnected struts, the struts comprising a plurality of serpentine bands and further comprising a generally linear connector strut attaching a peak of one serpentine band to a trough of an immediately adjacent serpentine band at the respective apices of each of the peak and the trough, wherein the respective apices of the immediately adjacent serpentine bands are axially aligned and connected with each other in opposing directions such that the single tubular framework has no gaps between the respective apices of the immediately adjacent serpentine bands.

Applicant’s independent claim 20, as currently amended, presently recites:

A stent comprising a single tubular framework having an outer surface and an inner surface and a plurality of interconnected struts, the struts comprising a plurality of serpentine bands and further comprising a generally linear connector strut attaching a peak of one serpentine band to a trough of an immediately adjacent serpentine band at the respective apices of each of the peak and the

trough, wherein the respective apices of the immediately adjacent serpentine bands are axially aligned and connected with each other in opposing directions such that the single tubular framework has no gaps between the respective apices of the immediately adjacent serpentine bands, and wherein the opposing apices reduce a distance between the immediately adjacent serpentine bands and attach to the generally linear connector strut, the framework further comprising an outer covering of PTFE and an inner covering of PTFE, the outer cover extending along at least a portion of the outer surface of the framework, at least a portion of the inner and outer coverings being contiguous, the generally linear connector strut having at least one marker which is radiopaque or which may be visualized using magnetic resonance imaging, the marker directly and only attached to the generally linear connector strut and disposed between the inner coverings and the outer coverings.

Independent claim 32, as currently amended, presently recites in part:

a single tubular stent framework having an interior surface, an exterior surface and a marker region, the framework comprising a plurality of serpentine bands and further comprising a generally linear connector strut attaching a peak of one serpentine band to a trough of an immediately adjacent serpentine band at the respective apices of each of the peak and the trough, wherein the respective apices of the immediately adjacent serpentine bands are axially aligned and connected with each other in opposing directions such that the single tubular framework has no gaps between the respective apices of the immediately adjacent serpentine bands, and wherein the opposing apices reduce a distance between the immediately adjacent serpentine bands and attach to the generally linear connector strut;

In addition, independent claim 33, as currently amended, presently recites:

A stent comprising a single tubular expandable framework having an outer surface and an inner surface, the tubular expandable framework comprising a plurality of serpentine bands, immediately adjacent serpentine bands having axially aligned and connected oppositely pointing apices such that the single tubular framework has no gaps between the respective apices of the immediately adjacent serpentine bands, wherein the oppositely pointing apices reduce a distance between the immediately adjacent serpentine bands, said framework further including linear connecting members connecting at least some of said oppositely pointing apices of the immediately adjacent serpentine bands, an outer covering of PTFE and an inner

covering of PTFE, the outer covering extending along at least a portion of the outer surface of the expandable framework, the inner covering extending along at least a portion of the inner surface of the expandable framework, at least a portion of the inner and outer coverings being contiguous, the stent further comprising at least one radiopaque marker directly and only attached to the generally linear connecting members and disposed between the inner covering and the outer covering.

As such, Applicant respectfully submits that the Wolff and Cottone references, individually or in combination, do not teach, suggest, or render obvious and every element and limitation of Applicant's independent claims 1, 20, and 32-33, as currently amended. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the § 103 rejection of independent claims 1, 20, and 32-33, as currently amended, as well as those claims that depend therefrom.

Claims 3-6 and 8 were rejected under 35 USC § 103(a) as being allegedly unpatentable over Wolff in view of Cottone as applied above, further in view of Ventura (U.S. Patent Application Publication No. 2004/0044399). Applicant respectfully traverses the rejection as follows.

Claims 3-6 and 8 depend directly or indirectly from independent claim 1. As presented above, Applicant respectfully submits that independent claim 1, as currently amended, is in condition for allowance in light of the deficiencies of the Wolff and Cottone references. Applicant respectfully submits that the Ventura reference does not cure the deficiencies of the Wolff and Cottone references.

Among other deficiencies, Applicant notes that the Ventura reference appears to teach radiopaque markers joining apices of the immediately adjacent serpentine bands are connected with each other in the same direction. As such, the Wolff, Cottone, and Ventura references, individually or in combination, do not teach, suggest, or render obvious each and every element and limitation of:

A stent comprising a single tubular framework having an outer surface and an inner surface and a plurality of interconnected struts, the struts comprising a plurality of serpentine bands and

further comprising a generally linear connector strut attaching a peak of one serpentine band to a trough of an immediately adjacent serpentine band at the respective apices of each of the peak and the trough, wherein the respective apices of the immediately adjacent serpentine bands are axially aligned and connected with each other in opposing directions such that the single tubular framework has no gaps between the respective apices of the immediately adjacent serpentine bands, and wherein the opposing apices reduce a distance between the immediately adjacent serpentine bands and attach to the generally linear connector strut, the framework further comprising an outer covering of PTFE and an inner covering of PTFE, the outer covering extending along at least a portion of the outer surface of the expandable framework, the inner covering extending along at least a portion of the inner surface of the expandable framework, at least a portion of the inner and outer coverings being contiguous, the stent further comprising at least one radiopaque marker directly and only attached to the generally linear connector strut and disposed between the inner covering and the outer covering.

as recited in Applicant's independent claim 1, as currently amended.

Accordingly, Applicant respectfully requests reconsideration and withdrawal of the § 103 rejection of dependent claims 3-6 and 8.

Claims 7, 12-14, and 18-19 were rejected under 35 USC § 103(a) as being allegedly unpatentable over Wolff in view of Cottone as applied above, further in view of Edwin (U.S. Patent Application Publication No. 2002/0095205). Applicant respectfully traverses the rejection as follows.

Claims 7, 12-14, and 18-19 depend directly or indirectly from independent claim 1. As presented above, Applicant respectfully submits that independent claim 1, as currently amended, is in condition for allowance in light of the deficiencies of the Wolff and Cottone references. Applicant respectfully submits that the Edwin reference does not cure the deficiencies of the Wolff and Cottone references. That is, the Wolff, Cottone, and Edwin references, individually or in combination, do not teach, suggest, or render obvious each and every element and limitation of:

A stent comprising a single tubular framework having an outer surface and an inner surface and a plurality of interconnected

struts, the struts comprising a plurality of serpentine bands and further comprising a generally linear connector strut attaching a peak of one serpentine band to a trough of an immediately adjacent serpentine band at the respective apices of each of the peak and the trough, wherein the respective apices of the immediately adjacent serpentine bands are axially aligned and connected with each other in opposing directions such that the single tubular framework has no gaps between the respective apices of the immediately adjacent serpentine bands, and wherein the opposing apices reduce a distance between the immediately adjacent serpentine bands and attach to the generally linear connector strut, the framework further comprising an outer covering of PTFE and an inner covering of PTFE, the outer covering extending along at least a portion of the outer surface of the expandable framework, the inner covering extending along at least a portion of the inner surface of the expandable framework, at least a portion of the inner and outer coverings being contiguous, the stent further comprising at least one radiopaque marker directly and only attached to the generally linear connector strut and disposed between the inner covering and the outer covering.

as recited in Applicant's independent claim 1, as currently amended.

Accordingly, Applicant respectfully requests reconsideration and withdrawal of the § 103 rejection of dependent claims 7, 12-14, and 18-19.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's below listed attorney at 612-236-0126 to facilitate prosecution of this matter.

CERTIFICATE UNDER 37 CFR §1.8: The undersigned hereby certifies that this correspondence is being electronically filed with the United States Patent and Trademark Office on this 21st day of

July, 2010.

Angela Miller
Name

A. Miller
Signature

Respectfully Submitted,
Brent C. Gerberding, et al.

By Applicants' Representatives,
Brooks, Cameron & Huebsch, PLLC
1221 Nicollet Avenue, Suite 500
Minneapolis, MN 55403

By: K. G. Waddick
Kevin G. Waddick
Reg. No. 57,007

Date: July 21, 2010